



## USGS Groundwater Information

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## What is Karst?

Karst is a terrain with distinctive landforms and hydrology created from the dissolution of soluble rocks, principally limestone and dolomite. Karst terrain is characterized by springs, caves, sinkholes, and a unique hydrogeology that results in aquifers that are highly productive but extremely vulnerable to contamination. In the United States, about 40% of the groundwater used for drinking comes from karst aquifers.

Some karst areas in the United States are famous, such as the springs of Florida, Carlsbad Caverns in New Mexico, and Mammoth Cave in Kentucky, but in fact about 20 percent of the land surface in the U.S. is classified as karst. Other parts of the world with large areas of karst include China, Europe, the Caribbean, and Australia.

Karst hydrogeology is typified by a network of interconnected fissures, fractures and conduits emplaced in a relatively low-permeability rock matrix. Most of the groundwater flow and transport occurs through the network of openings, while most of the groundwater storage occurs in the matrix. As a result, most karst aquifers are highly heterogeneous and anisotropic, and much of karst research has focused on developing innovative approaches for better understanding and managing these valuable water resources.

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